

Work Order ID 108125

October-07-13 9:12:01 AM

Item ID: D2938-2

Revision ID:

Item Name: 206 Saddle

Start Date: 10/07/13 **Start Qty:** 4.00 ***4***

Required Date: 10/07/13 **Req'd Qty:** 4.00 ***4***

Reference:

Approvals:	Process Plan: MLJ	Date: 13-10-07	Tooling:	Date:	Run	Start	*NR1*
	QC:	Date:	SPC (Y/N):	Date:	Stop		*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
100 *100* HAAS 1	HAAS CNC VERTICAL MACHINING #1 HAAS CNC vertical machine #1	0.00 Memo Program part number and batch number. 1-Inspect part number and batch number are programmed correctly. 2-Machine Step No 1 of Folio and visually inspect as per dwg D2938 & attached Dimension Sheet 3-Machine Step No 2 of Folio and visually inspect as per	13-11-07 /cmk 13/11/06	6	0				
110 *110* Mill Conv	CONVENTIONAL MILLING MACHINE Conventional Milling Machine	0.00 Memo Machine Keyway and inspect per attached dimension sheet	13-11-07 /cmk 13/11/06	6	0	P6	→		
120 *120* QC Quality Control	QC1- Inspect dimensions to dimension sheet Memo	0.00 0.00	13-11-07 /cmk 13/11/06	6	0				

108125

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NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA *[Signature]* Date: 13/11/22QA Closed: *[Signature]* Date: 13/11/22

Work Order: <u>108125</u>	DISPOSITION	AGAINST DEPARTMENT/PROCESS					
Part No. <u>D2938-2</u>	Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input checked="" type="checkbox"/> Work Order Update <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input checked="" type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>		
NCR No. <u>13-3243</u>							

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	13/11/07	100	1	Part Logo deep at .020 Should Be .010 - .015	DAS 12 9-89	Acceptable.	DAS 12 9-89	DAS 40 9-89	
Equip/Tooling				QC offset not set correctly operator was not verified	13/11/12	Cosmetic only,	13/11/12	13/11/07	DAS 12 9-89
Operator				Done					13/11/13
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear	General		
Bending	Bend	Grain	Ovalized
Centre Not Concentric to O/S	BOM/Route	Hardware	Pressure/Forced
Cracks	Broken/Damaged	Inspection Incomplete	Over/Under tolerance
Crushed/Crimped	Burrs	Instructions Incomplete/Unclear	Part Incorrect
Cuffs	Contamination	Maintenance	Part Lost/Missing
Heat Treat	Countersink	Mislabeled	Part Moved
Inspection Strip in Tube	Cut Too Short	Offset	Positioned Wrong
Ripples in Bend	Drill Holes	Out of Calibration	Power Loss/Surge
Torque Waves in Extrusion	Drawing	Out of Sequence	
Turning Sequence	Finish	Outside Dimensions	
Wave/Twist in Tube	Folio		

Work Order ID 108125

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Item ID: D2938-2

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: 206 Saddle

Start Date: 10/07/13 Start Qty: 4.00

4

Cust Item ID:

Required Date: 10/07/13 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* QC	QC8- Inspect parts - second check Quality Control	0.00	DAS 40 9-89	13/11/12		6	Ø		
140 *140* HandFinish	Chemical Conversion Coat per QSI005 4.1 Hand Finishing	0.00				6	Ø	CF 13-11-13	
150 *150* Powdercoat	White Gloss Ref 4.2.511 per QSI005 4.3-Alum Powder Coating	0.00				6	Ø	13-11-13	DAS 34 9-89
	Memo	0.00							
	START TIME: FINISH TIME:	12:45 1:15	OVEN TEMPERATURE:						

NCR: Yes / No

DQA: Date:

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____				DISPOSITION		AGAINST DEPARTMENT/PROCESS					
				Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>			
Part No. _____											
NCR No. _____											
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear				General							
Bending	General			Bend	General			Grain	General		
Centre Not Concentric to O/S				BOM/Route				Hardware	Ovalized	Pressure/Forced	
Cracks				Broken/Damaged				Inspection Incomplete	Over/Under tolerance	Temperature/Cure	
Crushed/Crimped				Burrs				Instructions Incomplete/Unclear	Part Incorrect	Weld	
Cuffs				Contamination				Maintenance	Part Lost/Missing	Wrong Stock Pulled	
Heat Treat				Countersink				Mislabeled	Part Moved		
Inspection Strip in Tube				Cut Too Short				Misread	Positioned Wrong		
Ripples in Bend				Drill Holes				Offset	Power Loss/Surge		
Torque Waves in Extrusion				Drawing				Out of Calibration			
Turning Sequence				Finish				Out of Sequence			
Wave/Twist in Tube				Folio				Outside Dimensions			

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Item ID: D2938-2

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: 206 Saddle

Stop ***NS2***

Start Date: 10/07/13 Start Qty: 4.00

4

Cust Item ID:

Required Date: 10/07/13 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals: Process Plan:

Date: Tooling:

Date:

Run Start ***NR1***

QC:

Date: SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 *160* QC	QC3- Inspect Part Finish	0.00	Shm			6			
Quality Control	Memo	0.00	13/11/13						

170 Identify as per dwg & Stock Location: ST 438 0.00
170
 Packaging
 Packaging

Lex **DAS**
26
9-89
13-11-14

180 QC21- Final Inspection - Work Order Release 0.00
180
 QC
 Quality Control

13/11/1808
MF
13/11/15

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS									
			Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Use-as-is <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>						
			Work Order Update <input type="checkbox"/>			Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>						
						Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>						
						Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>							
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance			Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector				
Doc/Data															
Equip/Tooling															
Operator															
Material															
Setup															
Other															
Process															
Supplier															
Training															
Unapproved															
FAULT CATEGORY															
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio				<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions				<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled	
														<input type="checkbox"/> Other	

Picklist Print

October-07-13 9:12:01 AM

Page 1

Work Order ID: 108125

Parent Item: D2938-2

Parent Item Name: 206 Saddle

Start Date: 10/07/13

Required Date: 10/07/13

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP: B 00.06.26 New DWG rev (mpp 2069)EC

IPP Rev:C As per Rev C 07-03-19 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6101-003 Saddle Billet, 7075		Manufactured	No			100	Each	22.0000	1	4			

Location	Loc Qty	Loc Code
MAT042	4	
103592	4	
MAT045	18	
97563	18	

108298 X6

and 13/11/06

NCR: Yes / No

DQA: Date:

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS									
			Rework Scrap Use-as-is Work Order Update	Skid-tube Machining Thermoforming Large Fab	Crosstube Small Fab Finishing Composite	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier	Engineering Quality Other								
Part No. _____															
NCR No. _____															
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector						
Doc/Data															
Equip/Tooling															
Operator															
Material															
Setup															
Other															
Process															
Supplier															
Training															
Unapproved															
FAULT CATEGORY															
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio		<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions				<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled			
														<input type="checkbox"/> Other	

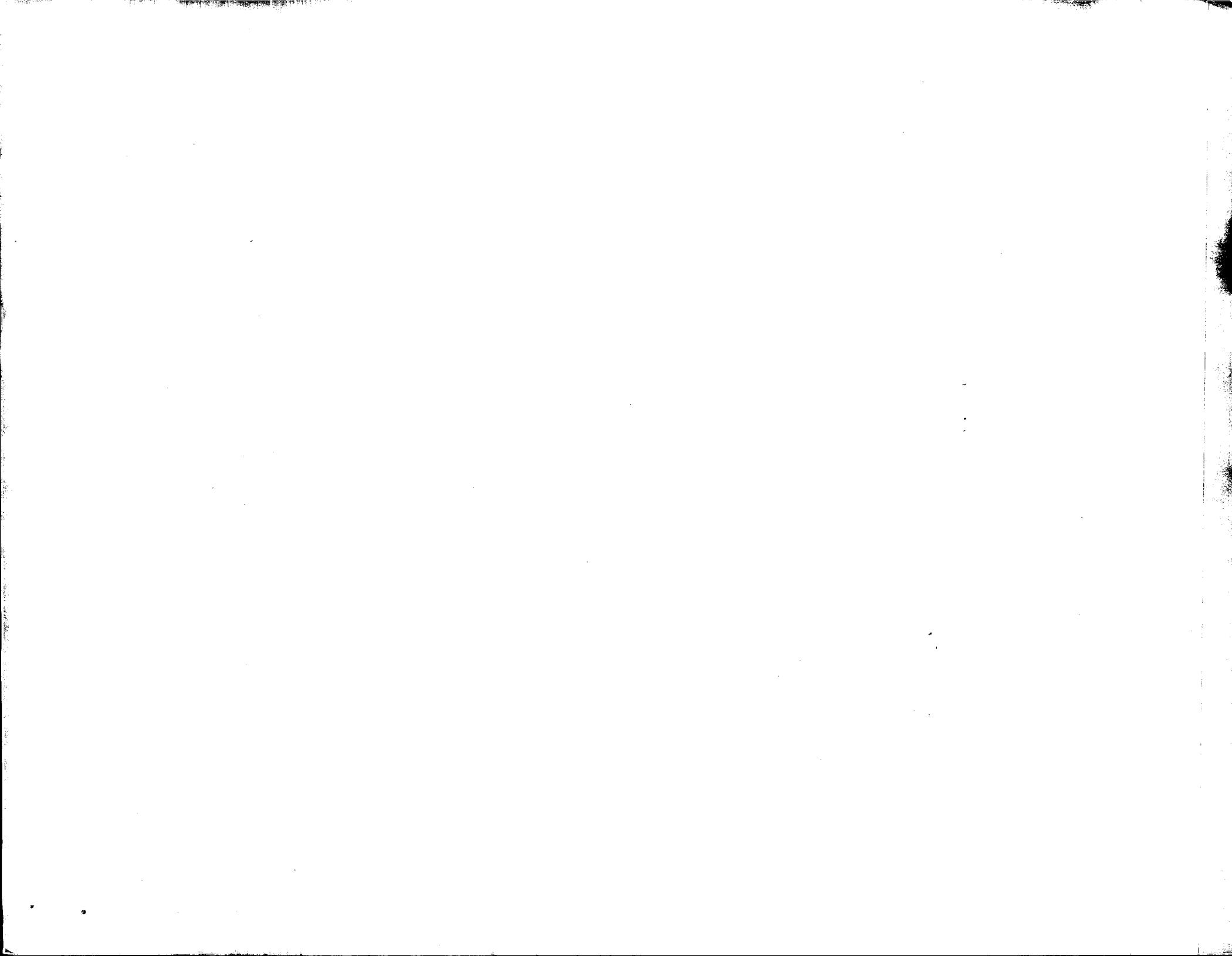
DART AEROSPACE LTD			Work Order:	108125
Description: 206 Saddle, Outboard, Right side			Part Number:	D2938-2
Inspection Dwg: D2938 Rev. C			Page 1 of 1	

Inspect dimensions highlighted on inspection sheet drawing D2938 Rev. C and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions					
				1	2	3	4	By	
A	0.100	0.140		.128	.129	.130	.117		
B	0.100	0.140		.129	.128	.130	.114		
C	0.100	0.140		.112	.115	.115	.108		
D	0.210	0.230		.224	.223	.223	.222		
E	1.245	1.255		1.250	1.248	1.249	1.248		
F	1.245	1.255		1.250	1.248	1.249	1.248		
G	2.495	2.505		2.500	2.499	2.498	2.498		
H	0.510	0.515		.512	.512	.512	.512		
I	1.572	1.582		1.577	1.577	1.577	1.577		
J	2.495	2.505		2.500	2.500	2.500	2.500		
K	0.257	0.262		.259	.259	.259	.259		
L	0.312	0.317		.314	.314	.314	.314		
M	0.235	0.240		.236	.236	.236	.236		
N	0.100	0.140		.124	.124	.124	.124		
O	0.540	0.560		.546	.546	.547	.548		
P	0.490	0.510		.500	.499	.503	.500		
Q	3.715	3.725		3.720	3.720	3.720	3.720		
R	2.720	2.760		2.740	2.740	2.740	2.740		
S	0.240	0.270		.253	.253	.253	.255		
T	0.100	0.180		.135	.135	.135	.135		
U	1.625	1.635		1.630	1.630	1.630	1.630		
V	1.362	1.372		1.366	1.366	1.366	1.366		
W	0.316	0.321		.317	.317	.317	.317		
X	1.250	1.270		1.260	1.260	1.260	1.259		
Y	1.565	1.585		1.575	1.575	1.5755	1.5733		
Z	0.178	0.198		.188	.188	.188	.188		
AA									
AB									
AC									
AD									
AE									
AF									
AG									
AH									
Accept/Reject				DAS 40					

Measured by:	<i>CDL</i>	/	<i>SS</i>	Audited by:	<i>9-89</i>
Date:	13/11/06	/	13-11-07	Date:	13/10/11/17

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Reformat; Added Dim. X-Y, DT8683, DT8686, DT8690	KJ/RF	
C	07.03.21	Revised per drawing revision C	KJ/JLM <i>CDL</i>	<i>SS</i>



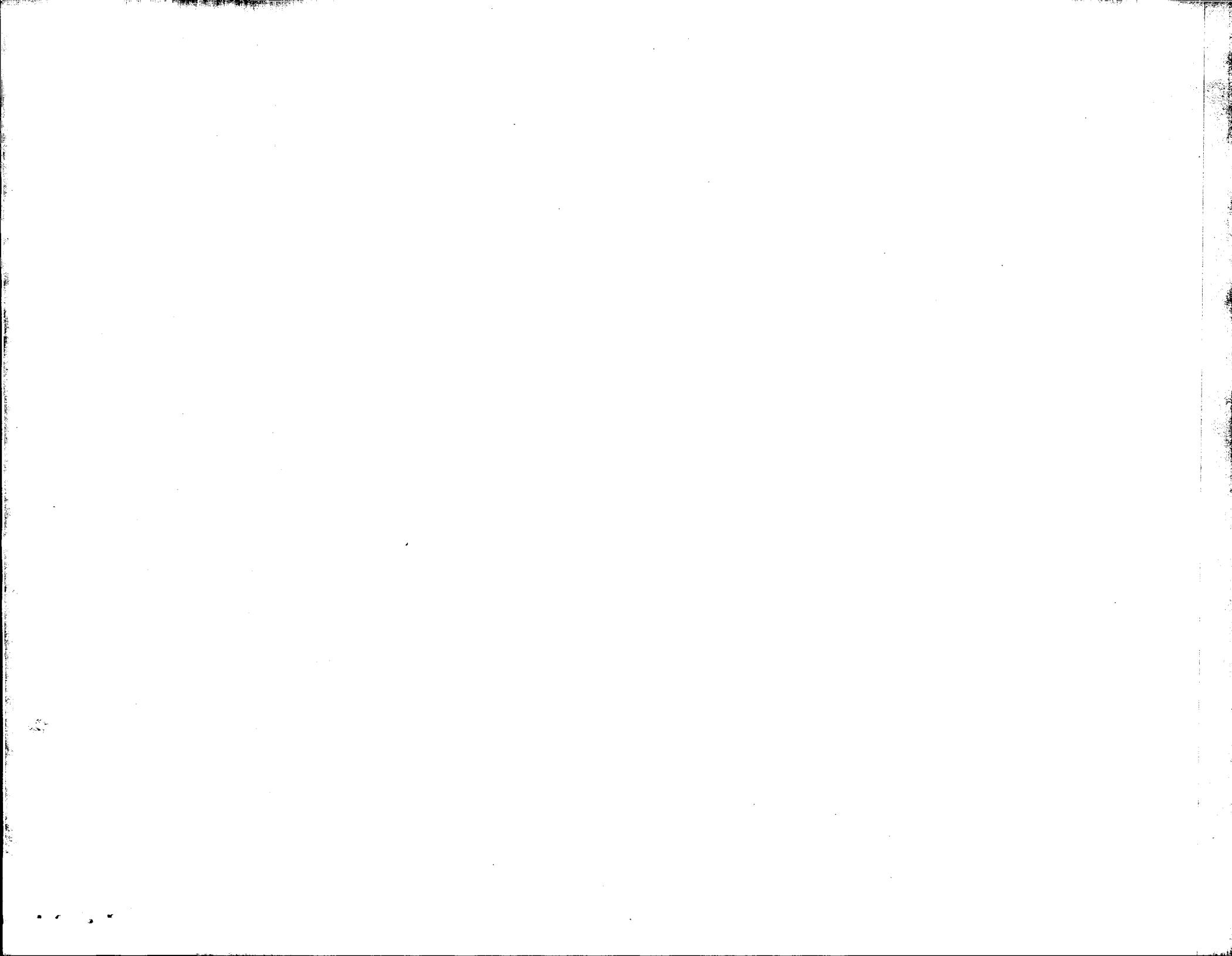
DART AEROSPACE LTD	Work Order:	108125
Description: 206 Saddle, Outboard, Right side	Part Number:	D2938-2
Inspection Dwg: D2938 Rev. C		Page 1 of 1

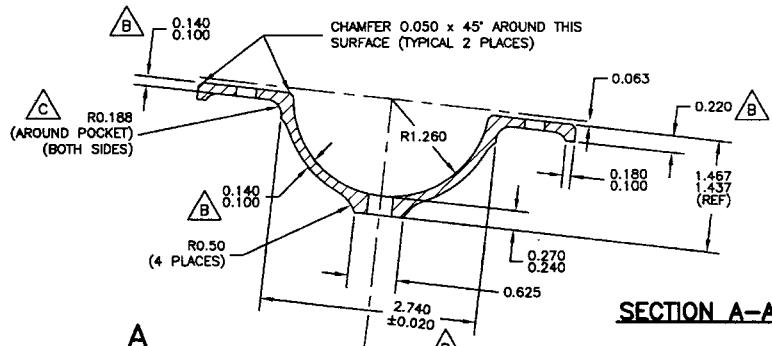
Inspect dimensions highlighted on inspection sheet drawing D2938 Rev. C and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	15	26	3	4	By	Date
A	0.100	0.140		.114	.115				
B	0.100	0.140		.118	.118				
C	0.100	0.140		.117	.117				
D	0.210	0.230		.220	.221				
E	1.245	1.255		1.249	1.249				
F	1.245	1.255		1.249	1.249				
G	2.495	2.505		2.499	2.499				
H	0.510	0.515		.512	.512				
I	1.572	1.582		1.577	1.577				
J	2.495	2.505		2.500	2.500				
K	0.257	0.262		.259	.259				
L	0.312	0.317		.314	.314				
M	0.235	0.240		.237	.237				
N	0.100	0.140		.124	.124				
O	0.540	0.560		.547	.547				
P	0.490	0.510		.500	.497				
Q	3.715	3.725		3.720	3.720				
R	2.720	2.760		2.740	2.740				
S	0.240	0.270		.255	.255				
T	0.100	0.180		.135	.135				
U	1.625	1.635		1.620	1.630				
V	1.362	1.372		1.367	1.367				
W	0.316	0.321		.317	.317				
X	1.250	1.270		1.258	1.259				
Y	1.565	1.585		1.573	1.573				
Z	0.178	0.198		.188	.188				
AA									
AB									
AC									
AD									
AE									
AF									
AG									
AH									
Accept/Reject				DAS					

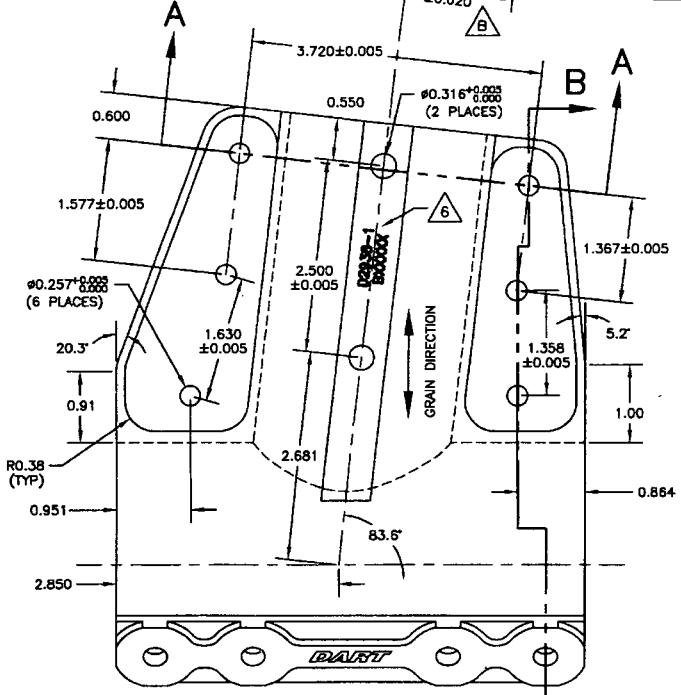
Measured by:	<i>CMF</i>	/	<i>ff</i>	Audited by:	<i>40</i>	9-89
Date:	<i>13/11/06</i>	/	<i>13-11-07</i>	Date:	<i>13/11/12</i>	

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Reformat; Added Dim. X-Y, DT8683, DT8686, DT8690	KJ/RF	
C	07.03.21	Revised per drawing revision C	KJ/JLM <i>28</i>	<i>SM</i>

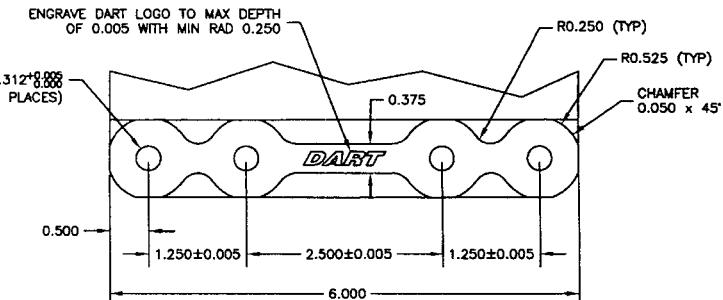
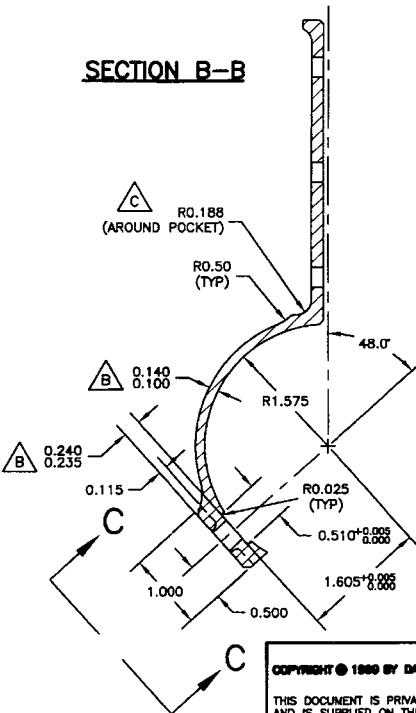




SECTION A-A



SECTION B-B



VIEW C-C

D2938-1 LH SADDLE (SHOWN)
D2938-2 RH SADDLE (OPPOSITE)

NOTES:

- 1) MATERIAL: ALUMINUM 7075-T7351 (00-A-250/12)
(MAKE FROM D6101-003 SADDLE BILLET, 7075)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
- 3) BREAK ALL SHARP EDGES 0.010 TO 0.020
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) ENgrave PART AND BATCH NUMBER IN THIS AREA 0.010 TO 0.015 DEEP

C	06.11.09	R0.188 WAS R0.30 TO R0.25
B	00.05.29	CHANGED GEOMETRY AND MATERIAL
A	99.11.12	NEW ISSUE
DESIGN	4	DRAWN BY CB
CHECKED	PH	APPROVED H
DATE		DRAWING NO. D2938
06.11.09		SHEET 1 OF 1
		TITLE SADDLE OUTSIDE
		SCALE 2.3

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108.1ZSMLS
13-10-07